

**Energy Report:
Public Policy Considerations**

**to the
Regulatory Flexibility Committee
of the
Indiana General Assembly
by the
Indiana Utility Regulatory
Commission**

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**Affordability
Reliability
Customer Choice
Public Policy Goals
Cooperative Process**

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IS RETAIL CUSTOMER CHOICE IN THE BEST INTEREST OF INDIANA?

I. PURPOSE AND SCOPE OF THE REPORT

This report is designed to aid the discussions taking place in meetings of the Regulatory Flexibility Committee regarding competition and deregulation of the electric utility industry. It summarizes the important public policy issues that face policymakers in "low-cost" states. The report provides information to help the committee answer the question: Is retail customer choice in the best interest of Indiana?

II. INDIANA IS A LOW-COST STATE

Data from the Energy Information Administration (EIA) for 1995 show that Indiana had the eighth lowest average revenue per kilowatt-hour in the United States.¹ The seven states with lower rates were Tennessee, Oregon, Montana, Wyoming, Washington, Idaho and Kentucky. Five of these are western states and have access to considerable amounts of hydroelectric power, while both Kentucky and Tennessee have significant amounts of federal power. Indiana is a low-cost state principally due to depreciated utility plants and access to plentiful coal supplies. Indiana electric rates compare very favorably with other states in this region, as shown in Tables 1 and 2.

TABLE 1
Average Revenue, Cents Per kWh by Sector In Indiana and Surrounding States

State	Residential	Commercial	Industrial	Other	All Sectors
Indiana	6.74	5.92	3.94	9.12	5.24
Ohio	8.60	7.68	4.17	6.26	6.24
Michigan	8.34	7.86	5.13	10.71	7.05
Illinois	10.37	7.88	5.27	6.80	7.69
Wisconsin	6.97	5.78	3.78	6.85	5.36
Tennessee	5.91	6.65	4.50	7.56	5.21
Kentucky	5.62	5.25	2.93	4.68	4.07
US Average	8.40	7.69	4.66	6.88	6.89

Source: Energy Information Administration, Electric Sales and Revenue 1995, Washington, D.C., December 1996, Table 12, p.25.

¹ Energy Information Administration, Electric Sales and Revenue 1995, December 1996, p. 25.

TABLE 2
Average Revenue, Cents Per kWh by Class of Ownership In Indiana and Surrounding States

State	IOUs	Publicly Owned	Cooperative	Federal	All Sectors
Indiana	5.07	5.51	6.73	---	5.24
Ohio	6.26	5.80	6.63	---	6.24
Michigan	7.06	6.40	8.95	---	7.05
Illinois	7.70	6.45	9.25	---	7.69
Wisconsin	5.33	4.76	7.31	---	5.36
Tennessee	4.33	5.42	5.87	2.94	5.21
Kentucky	3.98	4.91	4.84	2.18	4.07
US Average	7.15	6.02	6.92	2.69	6.89

Source: Energy Information Administration, Electric Sales and Revenue 1995, Washington, D.C., December 1996, Table 13, p.26.

A. Electric Generation Prices in a Competitive Environment

Two recent reports, one by the State Utility Forecasting Group (SUFG)² and one by the Energy Information Administration,³ have analyzed how prices for competitive generation services are likely to differ from regulated prices if competitive prices are based on marginal cost rather than regulated "cost-of-service" pricing. Cost-of-service pricing uses average cost as the basis for setting price, while marginal cost for generation services is based on the cost of producing the last kilowatt-hour of electricity in a given hour. The SUFG study focused on the state of Indiana and the EIA study took a multi-state regional and national perspective.

Both studies found that some regions of the country with low-cost generation might experience short-term price increases even though there will probably be benefits in the long term. With competition and no stranded cost recovery, the EIA projects national electricity prices will fall 8 to 15 percent over the short term relative to what they would be under traditional cost-of-service regulation. These short-term price decreases at the national level disguise the fact that some regions of the country will experience large declines while some other regions may experience short-term price increases. The Pacific Northwest, with its low-cost hydroelectric generating capacity, and portions of the Midwest, including Indiana, with its low-cost coal-fired generating

² State Utility Forecasting Group, Electricity Prices under Competitive Restructuring, November 1997.
(Draft)

³ Energy Information Administration, Electricity Prices in a Competitive Environment: Marginal Cost Pricing of Generation Services and Financial Status of Electric Utilities. A Preliminary Analysis Through 2015, August 1997.

capacity, could see short-term price increases. With full stranded cost recovery, the EIA report concludes competitive prices in the short term will differ very little from regulated prices.

Assuming that there is a competitive generation market where utilities will optimally dispatch generating units, the SUFG found that after an initial price decline, prices in Indiana could rise above the level predicted for the industry under continued regulation over the next few years. States with low-cost generation, like Indiana, could expect utility companies to export power to higher-cost regions. This export process could push up prices in a low-price state while prices in high-price states fall. Essentially, higher-cost neighbors will bid power away from local customers, who until now have been the sole beneficiaries of their state's advantageous electricity costs.

Over the long term, both studies conclude that competitive pressure in the generation market could stimulate efficiency improvements and technological advances that would cause electricity prices to fall relative to what industry performance would be under traditional regulation. Using sensitivity analysis, the EIA found that reductions in nonfuel operation and maintenance costs and lower construction costs caused by potential innovations in the competitive marketplace could reduce U.S. electricity prices by as much as 16 percent in 2015.

B. Lessons From Other Industries

Numerous industries in the United States have recently undergone some form of deregulation, including natural gas, telecommunications, airlines, trucking and railroads. A review of the experiences of these industries can provide broad lessons about the effects of deregulation and increased competition on the performance of industries and the impact on customers.

A recent report found that in each of the five industries, real prices paid by retail customers fell significantly as a result of deregulation and increased competition.⁴ Average inflation-adjusted prices fell by 4-15 percent within the first two years of deregulation. Within 10 years, inflation-adjusted prices were at least 25 percent lower, and sometimes close to 50 percent lower. One important lesson from this experience is that the benefits increase over time as companies and customers respond to the incentives created by the new environment. Of course, not all of these real price reductions were due to regulatory changes, but academic studies consistently show that deregulation and increased competition resulted in significant consumer benefits.

Experience also shows that employees in many deregulated industries either lost their jobs or had to accept lower wages early in the deregulation process. A broad pattern in the transition

⁴ See Robert Crandall and Jerry Ellig, Economic Deregulation and Customer Choice: Lessons for the Electric Industry, Fairfax, VA: Center for Market Processes, 1997.

to competition is that employees are likely to be harmed in the near term as companies are under pressure to reduce costs. In Indiana, utilities have already begun reorganization in anticipation of competition. The long-run effects on total industry employment and wage levels is extremely uncertain. Deregulation and increased competition can make the industry more dynamic, causing employment and wage levels to increase relative to what would have happened without deregulation.

There could be unforeseen innovations that develop as firms adjust to the new environment over time. These include innovations in technology, marketing, business strategy and organization. Examples from deregulated industries include natural gas hubs, airline hub-and-spoke systems and the multitude of new telecommunications services and equipment.

C. Short-Term Versus Long-Term Benefits of Retail Customer Choice

Beyond a possible initial drop in prices immediately following restructuring, as suggested by the SUFG, it is unlikely that there would be significant near-term benefits for any customer groups in Indiana with the introduction of retail customer choice, for the following reasons:

1. Indiana is a low-cost state.
2. Larger customers have, to varying extents, already achieved some of the benefits of a more competitive electric market as a result of "special" rates.
3. The electric utility industry is large and complex, and requires time to adjust to regulatory and structural changes.
4. Customer decisions for heating, cooling and many other purposes involve long-term investments in equipment that cannot be easily or cheaply changed.

Nevertheless, over a longer period of time, retail customer choice is likely to result in improved efficiencies that would lower costs; produce prices that better reflect costs; stimulate technological advances; and encourage the development of new products and services. Customers would have a more substantial role in deciding what services would be provided, and at what cost.

The financial risk of operating generation facilities and making future generation investments in a competitive market would be borne by the companies that own the facilities and make the investments, not electric customers. This reallocation of risks would be one of the primary sources of improved efficiency. Medium-term efficiency gains may be associated with improving the operating performance of existing generating facilities and increasing the productivity of labor operating these facilities. The most important opportunities for cost savings are associated with long-run investments in new generating capacity.

There would, however, be some long-term costs to customers as a result of the transition to retail customer choice. These costs include a significant "hassle factor" as customers, for the first time, deal with multiple vendors of electric services. Dealing intelligently with them would require a considerable amount of consumer education. In addition, the price of electricity is likely to be much more volatile in the market than it traditionally has been under regulation.

D. Implications for Economic Development

Indiana's economy is heavily dependent on the industrial sector and is concentrated in a relatively small number of industries. Many of these industries use large amounts of electricity and depend on low electricity prices to remain competitive in a global marketplace. While electricity price, availability and service reliability are important components that affect regional economic growth, the introduction of retail choice will change the relationship between energy prices and economic development. With retail choice, industrial and commercial customers will be able to shop the regional market to get low-cost generation regardless of their location. The challenge facing policymakers is to ensure that if the electricity market becomes more competitive across the country, Indiana retains its relative advantages in economic development.

III. WHAT SHOULD BE THE PUBLIC POLICY GOAL?

The objective of restructuring should be the opportunity for choice for all customers while maintaining or improving the reliability of the electric system and the affordability of the resource.

A. Customer Choice

Customer choice is the opportunity for all customers to choose their energy supplier. To provide "real" choices, a competitive market needs several reasonably comparable firms and the dissemination of accurate information that will allow consumers to make an informed selection. The following examples illustrate the types of choices that will confront customers in a competitive market:

1. The opportunity to choose lower cost power in exchange for lower reliability (e.g., the ability to curtail a portion of the customer's service through rates or direct control of various end uses).
2. The opportunity to choose "green power." Some customers will be willing to pay a higher cost in order to purchase power from renewable resources such as solar, wind or biomass.
3. The opportunity to choose packages of "energy services" that may include gas as well as electric service or other non-energy related services.

One of the possible consequences of customer choice is that the relationship between the electric utility and the customer, currently defined by regulatory mandate, will change. Today, an electric utility has the obligation to serve any customer located in its service territory. This obligation includes both connecting the customer to the distribution or transmission system and the provision of electricity. Under these conditions "universal service" is possible; all customers have access to electricity if they choose. The availability of universal service will be an important policy issue in electric utility restructuring, especially in conjunction with the need to provide electric service to low-income consumers.

With the advent of customer choice the utility's obligation to serve will be divided. The local distribution utility may take on the "obligation to connect"; meaning that the utility will be required to connect any customer wanting electricity to the utility's distribution and transmission lines so that the customer can purchase electricity from an alternative supplier. A "supplier of last resort" will take on the obligation of selling electricity to customers who cannot or will not choose a supplier. There are a variety of ways of determining the supplier of last resort, including requiring the distribution company to act as a broker for customers; purchasing power through a regional power exchange; splitting the load among all power suppliers operating in the state; or offering the load by bid to a power supplier.

Policymakers must address both the obligation to connect and the supplier of last resort issues if universal service is to be maintained once customer choice is instituted.

B. Reliability

Maintaining or improving the reliability of the electric system should be another component of the public policy objective. The strong reaction by federal and state policymakers to the two massive blackouts in the western United States last year is indicative of the intense interest in electric reliability. The Department of Energy, for example, empaneled a blue ribbon task force to examine reliability. Given the integrated nature of the electric system, lapses in reliability can be caused by problems in the generation, transmission or distribution components of the system. There is a concern that the quest for profits may reduce expenditures for maintenance or needed improvements, thus increasing the risk of outages.

The possible deregulation of the generating sector, combined with changing regulatory responsibilities (e.g., state versus federal authority over construction or upgrading of transmission facilities and siting of generating units), brings up the concern that "jurisdiction" over reliability may be an issue. Who will be responsible for assuring reliability in the future?

C. Affordability

The final component of the basic public policy goal is affordability. Affordability must be considered from two perspectives. First, given the experience in other deregulated industries, as competition intensifies, profit margins are likely to diminish. In order to bolster profits, there may be increased incentives for utilities to shift cost from unregulated affiliates to regulated affiliates. In addition to cost-shifting that imposes added costs for "captive customers," policymakers should also be concerned that cost-shifting provides an unfair competitive advantage for the utility in other markets. To minimize the opportunities for abuse, several states and the Federal Energy Regulatory Commission (FERC) have adopted "codes of conduct" to define how transactions between affiliates will be conducted.

Second, no matter how accurately prices reflect the actual costs of producing and delivering electricity, there will be consumers that cannot afford the service, as there are now. Policies that have provided financial aid for low-income consumers in the past must be reviewed and realigned in a restructured electric industry. Will the local distribution utility be responsible for administering low-income programs or will some other mechanism be put in place? Some mechanism will be necessary to prevent low-income consumers from falling through the cracks of restructuring.

D. Secondary Issues

While choice, reliability and affordability address the public policy objective, other issues may be considered when developing good public policy for customer choice. Length of transition, the encouragement of new energy providers and reciprocity are examples of secondary issues that policymakers may need to address when restructuring the electric utility industry.

1. Length of Transition

There may be a need to have a transitional (phase-in) period to provide a sufficient time for a competitive market to develop as well as to educate customers and energy companies. In some cases, the transition period is characterized as an experiment. On the other hand, some states have decided that a "flash cut" to competition is the appropriate public policy. There are risks and benefits associated with either strategy that policymakers adopt.

California, for example, enacted policies that are intended to provide all customers with choice at the same time, rather than a phased-in approach. This is, in part, a reaction to the concern that the largest customers have always been the first to benefit from expanded competition. As of October 27, 1997, 160 electric service providers have registered with California's commission to

provide service to customers with loads less than 20 kW, which are typically residential and small businesses. New Hampshire is an example of a phased-in approach that employed a pilot program. While all types of customers were permitted to participate in the pilot program, the total number was limited to 1,700 customers.

Several states have enacted customer choice legislation under a phase-in plan. In Pennsylvania, legislation requires direct retail access for all electric customers to be phased in over the next three years. Thirty-three percent of each utility's customers must be provided with retail access by January 1, 1999; 66 percent by January 1, 2000; and 100 percent by January 1, 2001. Montana will allow large industrial customers to exercise choice beginning July 1, 1998, with all residential, commercial and small industrial customers having choice no later than July 1, 2002.

Proponents of a phased-in approach suggest that there are different administrative issues associated with serving different types of customers. The extent of unbundling will also be a factor. If, for instance, metering and billing are deemed to be competitive services that do not have to be provided by the incumbent utility, there will be issues of data compatibility that will have to be addressed. These administrative issues, combined with customer education, can often be resolved in "pilots" or "experiments."

2. Role of Pilot Programs

Pilot programs are best used as part of a multi-step transition process. Electric pilot programs are intended to: 1) determine customer response to a variety of competitive service options, such as gauging response to prices, interest in various services, quality and reliability of service; 2) ascertain any administrative issues between the incumbent utility and its competitors; and 3) resolve administrative problems in dealing with customers, such as billing, metering, "slamming" or dispute resolution. Proponents contend that objective experiments can provide for a smoother transition period.

Opponents of pilot programs may argue that there are several inherent problems with experiments. First, without a "date certain" for full competition, pilots may be used as a delaying tactic. Second, competitors may not be willing to participate in a pilot program unless this is part of a phase-in. Third, pilots may not provide "objective" information. It may be that competitors would behave differently during an experiment, such as discounting their services below their costs. It may also be that the incumbent utility will limit the scope (e.g., the degree of unbundling) of the experiment in an effort to reduce any advantage that a competitor might have or exercise other advantages of incumbency (e.g., sharing information with its marketing affiliate without providing the same information at the same time to its competitors).

3. Encouragement of New Power Suppliers

There are no guarantees that a competitive market will develop immediately for different types of customers or in some areas of the state. As a result, policymakers may need to take actions to establish a favorable climate for fair and robust competition. Specific actions include monitoring incumbent utilities and their marketing affiliates for unfair advantages over competitors; requiring unbundled services to the maximum extent; and removing burdensome restrictions imposed on marketers that result in a "barrier to entry." Certification procedures are an example of the type of restrictions that, if excessively burdensome, could result in a significant barrier to entry.

4. Reciprocity

A state may decide to include in a customer choice plan a reciprocity provision that prohibits out-of-state electric suppliers from competing in the state unless their "home" state permits retail access. Such a provision would protect in-state electric suppliers from the loss of customers to suppliers located in "closed" states. A reciprocity provision will also reduce the number of suppliers available to customers that want a choice. Additional considerations when contemplating a reciprocity provision include:

1. Does such a provision violate the Commerce Clause of the U.S. Constitution?
2. Does the provision apply to just utilities or all suppliers of electric service?
3. What, if any, provisions should be made for multi-state electricity providers?
4. How will the provision be policed?

IV. PUBLIC POLICY AND BASIC INDUSTRY STRUCTURE

Policymakers should recognize that the transition to customer choice and effective competition will not necessarily be automatic, timely or without problems. Attention should be devoted to important industry structural questions if the move to customer choice is to be successful.

Moving from regulated monopolies to generation competition and customer choice requires that attention be directed at industry and corporate structures. The objective should be to remove unduly burdensome barriers to entry for new competitors and to create conditions that encourage a dynamic competitive market. Public policy and restructuring legislation should take into account numerous interrelated structural facets of the electric utility industry. These include corporate structure, relationships between utility distribution companies and their affiliates, the design of the

retail market and the role of load aggregators, marketers and brokers. All of these factors will affect the speed with which effective competition develops.

A. Corporate Structure

The electric utility industry is dominated by vertically integrated companies. These companies own and operate distribution, transmission and generation facilities within exclusive service territories. A major concern is how to prevent the incumbent utility from using its control over distribution and transmission facilities to unfairly favor its own generation or marketing affiliates. According to the FERC, potential generation competitors must have open access to the transmission system to be able to market power to new customers.⁵ This may require that the potentially competitive services be separated from remaining monopoly elements of distribution and basic transmission. Two solutions to this potential problem include functional and corporate unbundling.

B. Functional Unbundling

Functional unbundling is a process by which a vertically integrated firm splits itself into separate functions. For example, an electric utility could organize itself into a generation group, a transmission group and a distribution group, while retaining ownership of all three business groups. This separation is intended to facilitate the unbundling of electric service into competitive and non-competitive segments. In a functionally unbundled world, regulators may seek to establish codes of conduct regarding communication between the unbundled business groups. These codes are intended to prevent inappropriate flows of information and to promote a fair and level playing field for all market participants.

The FERC has decided that functional unbundling of wholesale generation and transmission services is necessary to implement non-discriminatory open access to transmission.⁶ The FERC believes that functional unbundling and a code of conduct will place the vertically integrated

⁵ Federal Energy Regulatory Commission, Order 888, page 50: "Non-discriminatory open access to transmission services is critical to the full development of competitive wholesale generation markets and the lower consumer prices achievable through such competition."

Page 156: "We are making this determination pursuant to our authority under section 206 of the FPA to remedy undue discrimination. As we explained . . . , market power through the control of transmission can be used discriminatorily to block competition."

⁶ Federal Energy Regulatory Commission, Order 888, page 57: "We conclude that functional unbundling of wholesale services is necessary to implement non-discriminatory open access transmission and that corporate unbundling (which could include selling generation or transmission assets to a non-affiliate [divestiture] - page 52) should not now be required."

utilities on a level playing field with other power producers in the generation market. The vertically integrated utility will be prohibited from using its control of the transmission system to block transactions of other power producers or favoring its own generation in a transaction.

Even with these and other safeguards, some industry participants are concerned that functional unbundling will not be sufficient to ensure non-discriminatory open access to transmission. Critics of functional unbundling argue that the utility will still favor itself on issues related to transmission planning, capital investment, operation and maintenance and replacement costs. Several ways of addressing these concerns have been suggested, including corporate unbundling and the development of independent entities to operate transmission systems.

C. Corporate Unbundling

Critics of functional unbundling have suggested corporate unbundling, or divestiture, as one solution to the incumbent utility favoring affiliates in energy transactions; i.e., self-dealing. For example, an electric utility could sell off its generation, transmission or distribution businesses. Currently, major investor-owned utilities (IOU) in California and the Northeast are selling large amounts of generation assets as restructuring is implemented in those regions.

D. ISOs and Other Institutions for Implementing Retail Competition

Most industry participants believe that as nonutility generation and transmission access increases, responsibility for coordinating the overall power system should be separated from the traditional functions of the incumbent utilities. Services now routinely provided by utilities would increasingly have to be unbundled and established by contract or other agreements among generators, power purchasers and transmission owners/operators. The basic institutional construct central to the debate is the independent system operator (ISO).

An ISO is an independent entity or institution that would control the transmission grid; that is, the transmission assets and whatever generation is needed for reliability. Although competing generating companies would make sales to wholesale and retail customers, they must use the transmission system to deliver the power to their customers. The ISO would essentially facilitate the use of the transmission system for all users. To ensure reliability, the ISO would administer operating criteria for the necessary ancillary services. Other potential responsibilities for the ISO vary according to the particular future industry structure under discussion.

The debate on the restructuring of the electric industry began with two types of models for retail competition, Poolco and Bilateral, that have been the basis for discussion. Despite the differences discussed later, there exist many areas of agreement among the proponents of each

model. First, nearly everyone agrees that basic transmission and distribution (i.e., the wires business) are natural monopolies and should remain as such. Second, the task of coordinating the use of the transmission system is also a natural monopoly, and so an entity such as an ISO should manage it. Third, the ISO must have no financial or economic interest in generators, distributors or final customers. Fourth, the ISO must have some type of control over generation dispatch, at least at the margin. This is necessary because adjusting dispatch is a principle means of affecting electricity flows, and thus constraints, on the grid. Finally, the goal of competitive power markets can be furthered by an ISO that coordinates grid operation and preserves reliability. An ISO should encourage open access to transmission services and protect against abuses of market power.

Given the areas of general agreement between the two market models, we now discuss the significant differences. The basic differences lie in defining the scope of ISO responsibilities for maintaining reliability, efficient operation of the transmission system and in offering non-discriminatory and comparable access to all industry participants. Generally, the Bilateral proponents favor much more narrow responsibilities for the ISO than the Poolco advocates.

In the initial version of the Poolco model, called a mandatory Poolco, all generators would be required to sell all of their power to a pool, and all customers would be required to buy power from the pool. Thus, one entity, the Poolco, would organize the electric power market. The ISO and the Poolco would be one and the same. Bids offered by generators to supply power at various prices would be used by the ISO to implement a central dispatch of the generators.

In the initial version of the Bilateral model, no government-mandated pool for power would exist. All transactions for electricity would be made contractually between the buyers and sellers or their agents (the name Bilateral emanates from these bilateral contracts). The ISO would have a narrow responsibility here: ensuring system reliability, coordinating power transactions and monitoring transmission congestion.

More recently the Poolco-Bilateral debate has moved away from the either/or situation. A widely discussed third alternative is a hybrid version with both spot and bilateral trade occurring simultaneously. The Hybrid model involves combining an ISO with a separate Power Exchange and permitting bilateral trades between consumers and generation providers. In this case, the ISO would be responsible for ensuring system reliability, efficient operation of transmission and non-discriminatory access to transmission services for all participants. The Power Exchange would be an independent entity with no affiliation or financial interest in distribution, transmission or generation companies or facilities, and it would provide a market for electric power with hourly or half-hourly prices.

E. Role of Aggregators, Marketers and Brokers

If effective competition is to develop, unnecessary barriers to entry should be eliminated. This is an important public policy goal of restructuring legislation and a key task for regulators during the transition period. New market participants such as aggregators, marketers and brokers will increase market liquidity and invent new services.

An aggregator is an entity that puts together customers into a buying group for the purchase of a commodity service. Buyer cooperatives or power brokers could perform this function. For example, a buyer cooperative could be formed and then hire a broker to make the best deal. Conversely, a broker or aggregator could come to the buyers and offer to aggregate their load and obtain a better price for electricity.

A power marketer is a business entity engaged in buying and selling electricity, but it does not own generation or transmission facilities. Power marketers take ownership of the electricity and offer risk management derivative products such as options, swaps, forward contracts and electricity futures. The job of a power marketer is a continual hunt for less-expensive generation and transmission paths, and better risk management products. Many power marketers are experienced natural gas marketers.

A power broker acts as an agent for others in negotiating contracts, purchases or sales of electricity and associated services with utility or power markets. Brokers do not own any transmission or generation facilities. Unlike a power marketer, a power broker does not take title to the electricity being bought or sold. A broker may also aggregate customers and arrange for transmission and ancillary services as needed.

Many IOUs have already formed separate affiliate companies that are power marketers. To the extent that utilities remain vertically integrated, legislation and regulatory actions must make sure that a utility's affiliate companies are not unfairly advantaged. The size of the role that aggregators, power marketers and brokers play in a restructured world will depend on many factors, including new government policies and regulations and the business acumen of the market players themselves. These new market participants will need to undergo a registration and certification process.

V. CONSIDERATIONS FOR STATE LEGISLATURES

Implementing retail choice requires a combined effort from both a state's legislature and utility commission if restructuring is to be successful. The legislature has the power to establish the broad public policy objectives that it believes restructuring should accomplish. Once these

objectives are specified, the commission must design and initiate a detailed plan to carry out the policies. Indiana can learn from the experiences of other states, such as California and Pennsylvania. California's attempts to deregulate electricity markets have been controversial, as both the legislature and the state commission worked independently of each other when drafting proposals. Only in the past months, after several years of divergent approaches, have the sides been able to work together. In Pennsylvania, however, a consolidated effort by the governor, state commission and stakeholders representing all sides resulted in a law introducing electric competition in a much shorter time. Because there are so many issues to consider, the best chance of success will come when all parties concerned, including utilities and other stakeholders, are involved in drafting any new legislation.

Clarifying the roles for both the legislature and the state commission during any restructuring process is a first step towards working together effectively. The legislature should establish clear public policy goals that it wants any new legislation to achieve. Policy decisions to be faced by the legislature may include the desirability of implementing retail customer choice; the timing or phase-in of retail competition; if, the extent to which, and how stranded costs are to be recovered; the treatment of cooperatives and municipalities; and reciprocity.

The state commission may be given the authority to develop a detailed plan and time frame for implementing the legislature's changes, and the role of the commission could evolve from one of a regulator to both a regulator and a supervisor. The commission must oversee the transition to a competitive generation market, but still regulate distribution and transmission, which in the short term will remain natural monopolies.

A. Jurisdictional Issues

At the present time, unless there is Congressional action preempting the states, state legislatures have the power to decide whether retail competition is in the best interest of the state. FERC cannot order retail wheeling. This limitation was placed on the FERC by Section 212(h) of the Federal Power Act of 1935 (FPA), and was reinforced by the language of the Energy Policy Act (EPA) in 1992--"No order [requiring transmission service] may be issued . . . which is inconsistent with any state law which governs the retail marketing areas of electric utilities."⁷ Utility franchise areas are set by state law, and it is the states that will determine if they wish to open up service territories and allow customers to negotiate with suppliers other than the local utility. States may permit only certain customers, such as large industrials, to participate in retail wheeling, or they may open the market for all customer classes.

⁷ Federal Power Act section 212 (g), as amended by EPA section 722(3), quoted by Robert E. Burns et al., Overview of Issues Relating to the Retail Wheeling of Electricity, Columbus, OH, May 1994.

From a state commission perspective, a possible jurisdictional drawback to retail competition is the loss of authority to the FERC over transmission services. The nature of retail customer choice requires unbundled service, i.e., the components of service must be priced separately. States have authority over traditional bundled retail service, but once unbundling is instituted, the FERC can claim jurisdiction over transmission. It receives this authority from the FPA, which gave the Federal Power Commission (the FERC's predecessor) the right to regulate "the transmission of electric energy in interstate commerce and . . . the sale of electric energy at wholesale in interstate commerce."⁸

A point to note is that if the FERC takes jurisdiction over retail transmission, this authority does not extend to all aspects of transmission. The siting of transmission facilities will remain the responsibility of the state or local government unless federal legislation assigns siting authority to the FERC, similar to its authority over the siting of interstate pipelines in the natural gas industry.

With unbundled service, states will retain jurisdiction over local distribution facilities. In Order 888, the final rule on open access, the FERC said it will give deference to states' determination of transmission and distribution facilities, providing the states use the following seven criteria for determination:⁹

1. Local distribution facilities are normally in close proximity to retail customers.
2. Local distribution facilities are primarily radial in character.
3. Power flows into local distribution systems; it rarely, if ever, flows out.
4. When power enters a local distribution system, it is not reconsigned or transported on to some other market.
5. Power entering a local distribution system is consumed in a comparatively restricted geographical area.
6. Meters are based at the transmission/local distribution interface to measure flows into the local distribution system.
7. Local distribution systems will be of reduced voltage.

⁸ Federal Power Act, section 201(b), 16 U.S. C. Sec.791 et seq. (1992) quoted by Burns et al, pp. 36-37.

⁹ Federal Energy Regulatory Commission, Order 888, p. 402.

B. Stranded Costs

The FERC considers itself the appropriate authority to handle stranded costs associated with wholesale transactions, and the states appropriate for handling retail stranded costs.¹⁰ According to Order 888, both the FERC and the states have jurisdiction over stranded costs associated with retail wheeling because they are each responsible for a portion of the unbundled transaction. States have jurisdiction over local distribution facilities and the service of delivering electric energy to end users, while the FERC has jurisdiction over the rates, terms and conditions of unbundled retail transmission in interstate commerce. Because it is state commissions that will determine whether or not to allow retail competition, however, the FERC has decided to let states handle stranded costs associated with retail customer choice. The FERC will become involved in recovery only if the state commission does not have the authority under state law to address stranded costs caused by retail competition.

A state's legislature should first decide whether retail stranded cost recovery will be allowed. If it is permitted, the legislature should set broad criteria for the extent and methods of recovery, and should specify a general administrative process for its commission to implement.

C. Estimation of Stranded Costs

One of the difficulties in deciding how to recover stranded costs is that there is no sure method for estimating a recovery number in advance. It is not known how much utilities will be able to cut costs in a competitive market, which in turn will affect the market price of electricity, which is the major factor in determining stranded costs.

Several states have spent months in hearings, trying to establish firm recovery numbers. A better approach is to realize that recovery can be dealt with over time; it is unrealistic to expect that actual stranded costs can be determined in advance. Using an estimate of stranded costs as a basis to set up a recovery method, such as an access charge, and then subjecting the estimate to true-ups reflecting market prices, is a more logical solution.

¹⁰ Federal Energy Regulatory Commission, Order 888, page 451: "We reaffirm our preliminary determination that recovery of legitimate, prudent and verifiable stranded costs should be allowed."

Page 8: "The Final Rule . . . will permit utilities to seek . . . recovery of stranded costs associated with a limited set of existing (executed before July 11, 1994) wholesale requirements contracts and provides that the commission will be the primary forum for utilities to seek recovery of stranded costs associated with retail-turned-wholesale transmission customers. It will also allow utilities to seek recovery of stranded costs caused by retail wheeling only in circumstances in which the state regulatory authority does not have authority to address retail stranded costs at the time the retail wheeling is required."

As one method of estimating a recovery number, several northeastern states have made stranded cost recovery contingent upon a utility's divestiture of generation assets. If a utility can sell its generation assets for more than the book value of the assets, the utility has no stranded costs. If the market value of the assets is less than the book value, the difference between the two figures will become the amount of stranded costs to be recovered.

1. Securitization as a Recovery Method

One method to recover stranded costs is securitization. Securitization refers to the creation of a financial security that is backed by a revenue stream pledged to pay the principal and interest of the security. Both California and Pennsylvania have enacted legislation authorizing the securitization of stranded costs. Utilities in these states have the largest amounts of stranded costs in the nation. In both states, securitization in the utility industry has involved legislation to create a transferrable property right (generally known as a "competition transition charge" or CTC) to collect the utility's uneconomic costs from ratepayers. Once the property right is created it can be transferred by the utility to a designated trustee. The trustee then sells a security or bond in the financial markets and pays the utility the net cash proceeds from the sale. The trustee promises to use the revenue from the CTC to pay the principal and interest on the bonds. The utility collects the CTC from customers and then passes these surcharges to the trustee. The trustee then uses the funds to pay interest and principal to the security holders. In this way securitization reduces the uneconomic costs of an electric utility with an up-front, lump-sum payment from the sale of a bond.

It is important to note that in these two states, the state does not assume any obligation to pay off the debt. Nevertheless, these securities have value because the legislature promises to create and maintain the stranded cost surcharge until the debt is paid. This stranded cost surcharge is the key difference between utility securitization and simple debt refinancing methods that utilities practice every day.

2. Other Methods of Stranded Cost Recovery

In addition to securitization, several other methods have been proposed to recover stranded costs. This section details four of the most commonly considered recovery options.

A surcharge on transmission and distribution (T & D) can place recovery costs on departing customers if they still use the system for transmission access. Some customers, such as those that become self-generators or municipals that bypass the system, would avoid the charge. The biggest drawback to a surcharge is the state/federal jurisdictional dispute that could emerge. The FERC

claims jurisdiction over transmission rates and thus any charges levied on them. States could respond by placing a charge on distribution, an area under their domain.

An access charge is similar to a T & D surcharge, but it would be placed on all customers, not just those departing. This charge would more evenly affect all customer classes, but would place part of the burden on customers that did not create any stranded cost. These charges, however, could continue to fund social programs that utilities commonly engage in, such as low-income assistance. Again, customers that completely bypass the system would not pay the charge.

An entrance fee for new market entrants would place part of transition cost on those that will benefit from competition. If a fee was assessed on new generation, former utility customers that self-generate would be required to pay. Difficulties lie in how to collect the fee, and whether it would be considered anti-competitive to raise the cost of entry.

An exit fee would charge to the departing customer the portion of costs incurred to serve that customer. Efficient competition is promoted by making the customer consider all costs involved before switching suppliers. As with entrance fees, the disadvantage with exit fees is difficulty in administration and collection, and if state commissions have the authority to instigate a fee.

D. The Role of Cooperatives and Municipals in a Restructured Industry

Municipal and rural cooperative utilities enjoy a unique status that is not shared by IOUs. Both municipal utilities and electric cooperatives may opt out of the jurisdiction of the Indiana Utility Regulatory Commission (IURC) in regard to the setting of rates and charges. This opportunity has been available to municipal utilities for many years and was given to the electric cooperatives by the Indiana Legislature in 1995. The public policy consideration is based on local control or self-rule; i.e., the municipal utility or cooperative is owned by its customers and the municipal board or cooperative board is elected by the customers of the utility.

Presently, several municipal and cooperative utilities have opted out of the IURC's jurisdiction. However, cooperatives and municipals cannot be ignored when considering restructuring. Although cooperatives and municipals are owned by their customers, they may face increasing pressure from their customers to be allowed to choose a supplier, or receive rates from the cooperative or municipal that are in line with current competitive prices.

In considering the restructuring of the electric utility industry, the unique status of municipal and cooperative utilities must be dealt with carefully. Following the historical public policy philosophy of the Indiana General Assembly, it would seem appropriate to allow the customer-owners of these utilities to have the option of choosing retail access by a vote of the customers.

Also, in order to stimulate a truly competitive market, a cooperative or municipal that wishes to participate in the retail competitive market by selling its generation to new customers outside its territory, should allow retail access to its own customers.

E. The Future of Low-Income and Environmental Programs

The major premise of those advocating low-income energy services is that a certain level of basic household energy service is essential in a modern industrialized society. Because some basic level of energy service is essential, many analysts agree that these basic services should be available to low-income households even if these services are provided below cost. The Public Utility Regulatory Policies Act (1978) required state regulatory commissions to consider the development of lifeline rates for electric and gas customers, although they were not instituted in Indiana. Over the past two decades, three basic policies have been developed for low-income customers: energy assistance, weatherization and consumer protection.

Restructuring has at least four implications for low-income electricity policy.¹¹ First, the affordability may change in either direction. Changes in affordability are important because roughly 65 percent of the total household energy budget goes to electricity in low-income households. Second, low-income customers may lack the market power and financial resources needed to realize the full benefits of restructured retail markets. Third, competitive pressures on utilities may lead to reductions in budgets for discretionary low-income programs. Fourth, consumer protections, such as a utility's obligation to serve, would need to be revisited and possibly recast under a new industry structure.

In addition to the previously mentioned policies, an important aspect of consumer protection is universal service. The universal service concept discussed in several states so far has common features. First, the motivation for universal service is to ensure that all customers have at least one choice of supplier. Second, each plan directs the distribution company to arrange for universal service. Third, electricity affordability is addressed through discounts or other policies. Fourth, the costs of universal service, including rate discounts, are funded through a non-bypassable charge on electricity use for all customers.

Finally, we note that the National Association of State Utility Consumer Advocates, including the Indiana Office of Utility Consumer Counselor (OUCC), has stated in a resolution in June 1997 that "it is good public policy to keep the customers least able to afford electric service on the system by means of appropriate low income assistance programs available for those

¹¹ Much of this low-income discussion is adapted from Baxter, Lester W., "Low-Income Energy Policy in a Restructuring Electricity Industry: An Assessment of Federal Options," Oak Ridge National Laboratory, ORNL/CON-443, July 1997.

customers who need them.” The group further urged “. . . the adoption of universal service protections that would include programs for making adequate electric service available at rates and prices which are affordable in any electric restructuring legislation or regulations.”¹²

1. Energy Conservation and Renewable Energy Programs

Some states, notably California, have included provisions for funding energy conservation programs in a restructured industry, although some experts believe that energy efficiency programs are best left to market forces. In Indiana, only three of the five IOUs have ever conducted full-scale conservation or demand-side management (DSM) programs. These are Southern Indiana Gas and Electric Company, PSI Energy and Indianapolis Power and Light. The main reason for the lack of programs is that Indiana’s low electric rates translate into low avoided costs, thus making it difficult for conservation programs to be cost-effective. After conducting these programs in the early and mid-1990s, all three companies are now in the process of terminating most programs. Reasons include lower avoided costs, making DSM less cost-effective; that some DSM programs were effective in changing the market for energy-efficient products, and thus incentives are no longer necessary; and a desire on the companies’ part to prepare for anticipated competition in electricity.

There are, however, other types of energy efficiency programs conducted in Indiana. The Energy Policy Division of the Department of Commerce administers several grant and loan and other types of energy efficiency programs that are funded by the federal government. The main goal of these programs is to increase the energy efficiency of Indiana businesses and homes.

Renewable energy may have an increasingly important role to play in the future. President Clinton recently declared that he wanted electric restructuring legislation to reduce carbon emissions as part of the U.S. plan to fight global warming. These types of new emission controls may raise the cost of coal-fired generation and thus make renewable sources of energy relatively less costly. On the demand side, many consumers have already shown a willingness to pay a premium to buy renewable energy in pilot programs across the nation.

VI. STATE AND LOCAL TAXES IN A RESTRUCTURED INDUSTRY

In analyzing the potential benefits of competition, we must be careful not to dismiss possible negative impacts that may develop as either a direct or indirect result. The IURC views state and local taxes as an area that could become a concern.

¹² National Association of State Utility Consumer Advocates, “Resolution: Urging the Adoption of Universal Service Protections That Include Programs for Assisting in the Affordability of Electric Service, as Part of Any Electric Restructuring Legislation or Regulations,” June 11, 1997, 1997-03.

Consistent with the current and long-standing system of traditional ratemaking, electrical utilities under the jurisdiction of the IURC have had their rates and charges set by a formula based on the cost of providing quality service to the customer. These charges, although similar in some cases, have varied from entity to entity because of the variability and unique circumstances present between utilities, as well as differing service territories and customer make-ups. In this process many specific costs are considered and typically passed through to customers as part of electric rates. Taxes levied upon and paid by the utilities have traditionally been one of these costs.

If a competitive market evolves, utilities would no longer be guaranteed a protected market, and would have to compete for their customers on a level playing field with other providers. Any development in the industry that affects the number of participants and leads to changes in total revenues and profits on both a per entity and total industry basis would create the prospect that state and local tax funds could be impacted to some degree.

The questions to address when considering the impacts of restructuring on taxes are (1) what would be the impact on tax revenues to the state and local governments, and (2) could the present tax structure create an unbalanced playing field between in-state and out-of-state competitive suppliers?

A. Types of Taxes

There are several types of taxes levied within the state of Indiana on electric utilities. Those with the most significant impact are property taxes, the gross receipts tax and the supplemental corporate income tax.

Property Taxes. Property taxes are assessed on most owners of property within the state based on the appraised value of the property they own, both real and personal in nature. Real property relates primarily to real estate and personal property relates to machinery and equipment-type items. In Indiana, property taxes are a leading source of income at the local level.

Gross Income Taxes. The gross income tax, commonly known as “gross receipts tax” (GRT), is one in which a single tax rate is applied to an entity’s gross revenues. It is important not to confuse Indiana’s GRT with a sales tax. The GRT is a tax on the funds generated by a sale upon the receipt of those funds and is not a tax imposed on the sale itself.

Any for-profit corporation doing business in Indiana is required to compute its Indiana income tax under both the gross receipts method and the adjusted gross income (AGI) tax method, remitting the greater of the two. The GRT equals 1.2 percent of total gross receipts and is generally greater than the traditional AGI tax common to individual returns. The amount of an

AGI tax equals 3.4 percent of an entity's net federal taxable income plus add-backs for state taxes and charitable contributions deducted on their federal return (referred to as 3.4 percent of "Indiana Taxable AGI").

Supplemental Corporate Net Income Tax. In addition to property and gross receipts taxes, all corporations doing business in Indiana are assessed a supplemental net income tax of 4.5 percent of their net income. For the purposes of this tax, supplemental net income is defined as Indiana Taxable AGI minus the greater of the assessed GRT or AGI tax.

The three types of utilities, investor-owned, cooperatives and municipals, are not subject to the same tax treatment. IOUs, because they are for-profit corporations, must pay property, gross receipts and supplemental corporate net income taxes. Cooperatives are nonprofit and are exempt from supplemental corporate net income taxes. Municipal utilities are nonprofit local government agencies and so must only pay the GRT, although a few have additional expenses such as "Payments in Lieu of Taxes" (PILT) calculated into their rate structures. Municipal utilities are essentially extensions of the local government and PILT payments serve as a substitution for property taxes in an effort to provide needed financial support at the local level.

B. Current Tax Impact

Property Taxes. In the broad view, the effect of any change in the electric industry landscape would seem to have a minor impact on state property tax revenues. Based on 1994 valuations, all property within the state was valued at \$43.8 billion and produced property tax revenues of roughly \$4.4 billion. Out of this total, only 6.54 percent was utility-related and, more specifically, only 2.1 percent was electric utility-related (see Appendix, Table 1).

In the specific case, however, certain localities have large utility generating plants that compose a significant percentage of the local tax base. In 1996, 93.7 percent of all property taxes paid by electric utilities were paid by IOUs and nearly 60 percent of that percentage was concentrated in only four counties: Jasper, Gibson, Pike and Spencer. The impact of electric utility plant facilities on the total tax base in those four counties is quite significant as a percentage of the total county tax base: Spencer, 45.41%; Pike, 40.53%, Jasper, 34.68%; and Gibson 21.61%. In addition, electric utility plant facilities make up 9 percent or more of the total county property tax base in five other counties: Sullivan, 33.22%; Vermillion, 16.67%; Posey, 12.05%; Switzerland, 10.41%; and Dearborn, 9.44%, as shown in the Appendix, Table 3.

We believe these nine counties have enough potential exposure in the area of property taxes to raise concern. In preparation for a worse case scenario the IURC suggests that an in-depth analysis be performed concerning (1) the impact on the local tax base in these nine counties should

generating plants close, (2) the age and competitiveness of the plants vs. foreseeable alternatives and (3) the circumstances under which this potential tax revenue loss could occur.

Because Kentucky is the only state in the region that is significantly below Indiana in average cost per kilowatt-hour, the likelihood of significant plant closure in Indiana is small. Given current information, it is just as likely that plant requirements in Indiana would increase if there were competition as Indiana utilities gain market share in other states. Within the current landscape it seems unlikely that Indiana would be shut out of other markets while at the same time losing significant shares of their home market.

Gross Receipts Tax. The gross receipts tax issue is two-pronged, dealing with both market share and price. State GRT revenues from electric utilities have been reasonably steady in recent years, decreasing only 0.9 percent since 1994, and currently stand at roughly \$58 million. Of this amount, 85.8% comes from IOUs, 8.4% from REMCs, and 5.8% from municipals (see Appendix, Table 2). Although they total \$58 million, utility gross receipts taxes are not especially significant on a percentage basis in the state budget.

C. Market Share and Competitive Advantage Concerns

While Indiana is overall a low-cost state, it is not without high-cost markets that could conceivably be exploited by out-of-state utilities if retail competition is introduced. Loss of market share by Indiana utilities could impact state tax revenue.

If a tax loophole exists that provides for different treatment of intrastate versus interstate sales, loss of market share could translate into decreased tax receipts. One possible interpretation of present Indiana tax law is that any interstate commerce, whether it be from Indiana to another state or from another state into Indiana, could be exempt from GRT. For example, if Indiana utilities exported electricity to other states, these out-of-state transactions would escape the Indiana GRT, decreasing revenue to the state.

Another scenario centers on the influx of out-of-state generation into Indiana. If out-of-state providers were able to sell electricity directly to Indiana consumers, Indiana utilities would not only lose market share, and hence possibly close in-state plants, but the state might not have the ability to collect GRT from the out-of-state utilities, thus losing revenue. The exemption of interstate sales from the GRT could create a competitive advantage for out-of-state suppliers.

The legislature may need to consider modifying the GRT portion of Indiana tax law, if possible, to permit GRT assessment on interstate receipts generated by out-of-state interests making electricity sales to Indiana consumers. Without this modification, an uneven playing field could

exist that gives out-of-state utilities a competitive advantage in Indiana. The policies and laws of neighboring states that influence retail competition and taxes should be closely monitored.

D. Price Concerns

In its 1996 report on Indiana Electricity Projections and the Effects of Competition, the SUFG indicated they expected average electricity rates to continue to drop over the next ten years to a low of 4.1 cents per kWh. This would be a price decrease of 26.8 percent from the 1994 average of 5.6 cents and a reduction of an additional 21.76 percent from the state's current average of 5.24 cents. If the SUFG estimates are accurate, the impact on the state budget in ten years would be that roughly \$12.6M of the current \$58M in electric utility-related GRT revenues would be lost.

E. Summary

Because of the many factors involved, it is difficult to determine precisely what the effects of competition would be on state tax revenue. Further intensive study by the appropriate entities is essential.

VII. THE ROLE OF THE INDIANA UTILITY REGULATORY COMMISSION: TODAY AND INTO THE FUTURE

A. The IURC's Current Role

The Commission is a fact-finding body that hears evidence in cases filed before it and makes decisions based on the evidence presented in those cases. An advocate of neither the public nor the utilities, the IURC is required by state statute to make decisions that balance the interests of all parties to ensure the utilities provide adequate and reliable service at reasonable prices.

In addition to electric and natural gas, the IURC regulates telecommunications, steam, water and sewer utilities. These utilities may be investor-owned, municipal, not-for-profit or cooperative utilities, although municipal, not-for-profit and cooperative utilities may operate outside the IURC's jurisdiction. Further, Indiana statutes provide that municipal utilities, not-for-profit corporations and cooperative telephone and electric companies that are currently under IURC jurisdiction can remove themselves from the Commission's jurisdiction by ordinance of the local governing body or a majority vote of the people in the municipality.

The Commission regulates various aspects of the public utilities' business including their rates, financing, bonding, customer service, environmental compliance plans and service territories.

The Commission has regulatory oversight concerning construction projects, and acquisition of additional plants and equipment. The Commission has authority to initiate investigations of all utilities' rates and practices.

The IURC is created and authorized by Title 8 of the Indiana Code. Numerous court decisions further define the Commission's functions.

B. The IURC's Role in Restructuring

If restructuring were to advance in Indiana, the role of the IURC would change, evolving as competition develops. Where legislation is required, an examination of experience in other states indicates that the best results are achieved where lawmakers and the commission work together.

In most states, the legislature and commission outline the requirements of restructuring. These requirements can be very specific as to what actions the utilities must take to restructure or they can be more general guidelines, allowing the utilities some flexibility in their restructuring. The utilities, in turn, develop a plan for meeting these requirements. The commission is then responsible for reviewing the plans. Common elements of utility restructuring plans include:

- Properly timed consumer education programs.
- Timing of customer access to choice.
- Estimated stranded costs and methods of recovery.
- Methods of divestiture, if divestiture is required.
- Utility rates during the transition period.
- Provisions for low-income customers, renewable energy sources, environmental standards and other special or required programs.

As the restructuring process proceeds, a commission has to focus on the development of competition while maintaining the availability of an affordable, reliable power supply for customers. To accomplish this goal, a commission may issue rules or orders to ensure customers have fair access to a variety of power suppliers, that power suppliers are viable businesses that can supply the customers needs, and that customers have the information they need to make a choice of power suppliers.

In situations where the utilities do not divest generation facilities, it may be necessary for a commission to develop rules on how the generation subsidiary and the transmission and distribution subsidiaries will do business. To ensure that the utility's generation subsidiary does not get preference over other power suppliers for access to the transmission or distribution system, a commission can issue a Code of Conduct for Affiliate Transactions. The Code of Conduct

would detail how a request for transmission or distribution access by the company's generation subsidiary will be processed relative to requests for access by other power suppliers. The Code of Conduct sets standards that would help identify non-competitive transactions and give the injured party a basis and mechanism for complaint.

Another set of rules that may be needed are the certification requirements for power suppliers. These rules are designed to protect the customer from "fly-by-night" power suppliers. Power suppliers wanting to sell power in the state would have to meet certain requirements. These requirements may include:

- Demonstration that the power supplier has the financial, technical and managerial means to uphold its obligations to customers and to comply with all relevant laws.
- Maintenance of a minimum level of net assets.
- Identification of the officers of the company and the number of employees, by corporate division, that are employed by the company.
- Establishment of accounting standards to identify all revenues that the company generates as a result of its business operations in the state.
- Disclosure of any illegal acts or certificate violations with which the company has been charged in the past ten years in any state or federal jurisdiction.
- Provision of a bond or some alternative insurance that would give customers a fund against which to secure damages attributable to fraud or non-performance.
- Adherence to requirements developed and administered by the local distribution company as part of its tariffs and by the regional ISO.
- Adherence to any statewide or regional requirements, such as environmental standards.
- Compliance with state or regional standardized disclosure requirements regarding the supplier's price, price variability, resource mix, environmental characteristics of the resource mix and contract terms and conditions.

Consumer education would be a key factor in achieving meaningful consumer choice and fostering a competitive retail generation service market. Consumers must have easy access to accurate and comprehensible information so that they can make informed decisions about the supplier and services they choose. Informational materials should be readily available, tailored to customer type, and disseminated through multi-media intended to reach different customer groups.

To ensure adequate consumer education it might be necessary to set standards or requirements. Requirements might include:

- Marketing materials and bills distributed by aggregators and marketers must conform to a standardized format so that customers can readily compare suppliers' current and

historical price and quality of service, types of resources, environmental impacts of the resource mix and terms and conditions of service.

- Payment schedules, disconnection procedures and dispute resolution procedures must be disclosed to customers both on educational materials and on their bills.
- Consumers must be informed that they have the right to prevent their distribution utility or their alternative power supplier from releasing their personal information, including: name, address, payment history, specific usage patterns and appliances.

This type of information would not only help consumers make informed choices of power suppliers but might also help prevent fraudulent behavior by the power suppliers. In California, legislators and regulators believed that consumer education was important enough that they budgeted \$89 million for an education program. The cost will be recovered through electric rates.

C. The IURC's Role in the Future

If customer choice becomes the established model for the electric industry the Commission's role would continue to evolve. It is likely that the Commission would retain some familiar responsibilities; for example, regulating the monopoly service of the local distribution company and acting as a forum for customer complaints and questions.

In addition, it might become the Commission's responsibility to monitor the electric industry to assure that choice of power supplier remains a viable option for the consumer. The IURC, the OUCC and the Attorney General's Office (AG) might have to develop a new working relationship to ensure consumer protection in the restructured electric industry. It is possible that the Commission could act to police against anti-competitive behavior; bringing industry-wide abuses to the AG's attention for further action and act as first contact for customer complaints. Again, if the investigation into a customer complaint indicates that the power supplier or distribution utility is regularly engaging in anti-competitive behavior, the complaint would be transferred to the AG's office.

VIII. CONCLUSION

While there are important distinctions between energy industries and other industries, there are broad lessons that can be learned from the experience of deregulated industries. These experiences show that real price declines, and advanced technical innovations, can result from increased competition. However, there is a concern that competition in the electric industry could increase the risk of outages and other problems.

The studies by the EIA and the SUFG found that low-cost states, such as Indiana, may experience short-term price increases as low-cost power is exported to states with higher-cost power. Both studies also concluded, however, that there would probably be long-term benefits as a result of increased efficiencies. The short-term adverse consequences of competition could be minimized by "price caps" and service standards to ensure that employees are protected and customers have access to low-cost and reliable energy.

In the longer term, customers could benefit from technological advances in the production and transmission of electricity. Increased competition in the fuel markets could provide opportunities to lower fuel costs. Based on recent experience, future generating units will be substantially less expensive than current units. Customers could also benefit from more accurate pricing, the development of new products and services and a more substantial role in deciding what services would be provided.

In the long run, competition in the electricity market could be in the best interest of Indiana. Experience in other states has shown that the best outcomes and smoothest process to bring about customer choice in the electric industry have resulted from a cooperative effort led by the governor, the legislature and the state commission working together with all stakeholders. Indiana should be prepared to respond to competition created by other states, especially those surrounding Indiana, and to any federal legislation that requires nationwide competition in the electricity market.

IX. ACRONYMS

AGI	Adjusted Gross Income
CTC	Competition Transition Charge
DSM	Demand-Side Management
EIA	Energy Information Administration
EPAct	Energy Policy Act of 1992
FERC	Federal Energy Regulatory Commission
FPA	Federal Power Act of 1935
GRT	Gross Receipts Tax
IOU	Investor-Owned Utilities
ISO	Independent System Operator
IURC or Commission	Indiana Utility Regulatory Commission
OUC	Office of the Utility Consumer Counselor
PILT	Payments in Lieu of Taxes
PURPA	Public Utility Regulatory Policies Act (1978)
SUFG	State Utility Forecasting Group
T & D	Transmission and Distribution

X. APPENDIX

Net Assessed Value and Property Taxes Levied Payable in 1995	Table 1
Summary of Taxes Paid by Indiana Electric Utilities for 1994, 1995 & 1996	Table 2
Property Tax Summary for Significant Electric Generation Plants	Table 3

TABLE 1
Net Assessed Value and Property Taxes Levied Payable in 1995

Real & Personal Property	Net Assessed Value	Percent of Total	Taxes Levied	Percent of Total
Farm	\$ 4,877,197,537	11.13	\$ 365,988,673	8.31
Business	19,063,327,956	43.51	2,004,250,079	45.49
Bank Personal Property	70,299,931	0.16	8,164,196	0.19
Utilities	2,815,943,008	6.43	288,334,670	6.54
Residential & Individual	16,984,098,438	38.77	1,739,063,754	39.47
Totals	\$ 43,810,866,870	100.00	\$ 4,405,801,372	100.00

TABLE 2
Summary of Taxes Paid by Indiana Electric Utilities for 1994, 1995 & 1996

Utility	Property Taxes	Gross Receipts Taxes	Supplemental Net Income Taxes
Investor-Owned Electric Utilities	\$ 93,110,470	\$ 49,727,995	\$ 40,619,429
Rural Electric Membership Corporations	6,249,234	4,878,884	---
Municipal Electric Utilities	---	3,367,544	---
1996 Total	\$ 99,359,704	\$ 57,974,423	\$ 40,619,429
Investor-Owned Electric Utilities	92,367,911	50,588,257	34,275,051
Rural Electric Membership Corporations	6,780,167	5,114,948	---
Municipal Electric Utilities	---	3,363,873	---
1995 Total	\$ 99,148,078	\$ 59,067,078	\$ 34,275,051
Investor-Owned Electric Utilities	85,020,905	49,083,722	31,642,767
Rural Electric Membership Corporations	7,441,787	5,882,275	---
Municipal Electric Utilities	---	3,527,682	---
1994 Total	\$ 92,462,692	\$ 58,493,679	\$ 31,642,767

TABLE 3
Property Tax Summary for Significant Electric Generation Plants

County	Total Assessed Value	Utility	Local Assessment		State Board Distributable	Utility Total	% Utility Total of Total Assessed Value
			Real Estate & Improvements	Personal Property			
Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H
Carroll	\$ 183,004,665	NIPSCO	\$ 608,830	\$ 6,320	\$ 1,031,130	\$ 1,646,280	0.90%
Dearborn	332,025,977	I&M	7,063,340	5,524,770	18,752,470	31,340,580	9.44%
Fayette	196,386,705	PSI	357,960	211,810	2,235,080	2,804,850	1.43%
Floyd	495,063,355	PSI	2,582,520	2,168,730	12,214,970	16,966,220	3.43%
Gibson	296,517,006	PSI *	10,694,240	19,046,330	34,323,220	64,063,790	21.61%
Hamilton	1,873,090,520	PSI	1,320,290	1,060,730	15,383,650	17,764,670	0.95%
Jasper	353,960,465	NIPSCO	26,502,430	7,432,700	88,823,560	122,758,690	34.68%
Knox	268,170,850	PSI	1,032,200	793,810	6,381,050	8,207,060	3.06%
Lake	3,073,867,843	NIPSCO	16,277,190	17,314,650	42,898,770	76,490,610	2.49%
Marion	8,007,857,930	IPL	15,780,030	13,044,220	97,770,200	126,594,450	1.58%
Morgan	417,389,620	IPL	2,287,230	2,215,160	9,989,970	14,492,360	3.47%
Pike	162,113,750	IPL	10,068,720	10,011,090	45,618,180	65,697,990	40.53%
Porter	1,421,159,657	NIPSCO	9,780,550	7,325,520	35,715,650	52,821,720	3.72%
Posey	430,110,395	SIGECO	15,246,620	6,147,710	30,422,700	51,817,030	12.05%
Spencer	294,255,990	I&M	16,152,750	10,876,900	106,592,090	133,621,740	45.41%
Sullivan	195,084,910	HE & I&M	12,657,310	6,448,380	45,691,810	64,797,500	33.22%
Switzerland	46,640,611	PSI	3,878,690	35,170	942,450	4,856,310	10.41%
Vanderburgh	1,232,423,660	SIGECO	3,750,180	2,809,830	13,236,520	19,796,530	1.61%
Vermillion	218,545,075	PSI	4,288,530	4,641,300	27,501,230	36,431,060	16.67%
Vigo	760,852,930	PSI	4,114,910	3,194,400	28,168,140	35,477,450	4.66%
Wabash	267,162,608	PSI	201,160	208,870	3,698,660	4,108,690	1.54%
Warrick	566,088,070	SIGECO	6,686,740	2,233,050	17,071,960	25,991,750	4.59%
White	301,908,555	NIPSCO	1,375,080	539,650	4,748,510	6,663,240	2.21%
Total	\$ 21,393,681,147		\$ 172,707,500	\$ 123,291,100	\$ 689,211,970	\$ 985,210,570	4.61%

* The Gibson plant is operated by PSI but jointly owned by PSI, WVPA and IMPA.